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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/993,114 | 11/05/2001 | Hung T. Nguyen | 01-633 | 6984 |
| 24319 | 7590 | 01/24/2005 | EXAMINER | |
| LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035 | | | MEONSKÉ, TONIA L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2183 | |

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/993,114 | Applicant(s) NGUYEN ET AL. | |
| | Examiner Tonia L Meonske | Art Unit 2183 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Arora, US Patent 6,115,808.

3. The rejections are respectfully maintained and incorporated by reference as set forth in the last office action, mailed on August 6, 2004.

Response to Arguments

4. Applicant's arguments filed November 8, 2004 have been fully considered but they are not persuasive.

5. On pages 7 and 8, Applicant argues in essence:

“The Applicants respectfully disagree since Arora does not disclose identifying and tracking condition instructions including causing link pointers to move through conditional link pointer registers that are associated with stages in a pipeline of a processor as recited in independent Claims 1, 8, and 15.”

However, Arora has taught “identifying and tracking condition instructions including causing link pointers to move through conditional link pointer registers that are associated with stages in a pipeline of a processor”. In Arora, each instruction is identified and tracked by the use of the predicate status vector (Figure 1, element 100). A predicate status vector element, or the claimed conditional link pointer, is associated with an instruction moving through the stages of the pipeline. At a given time, each executing

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instruction is associated with a stage of the pipeline. Since a conditional link pointer is associated with an executing instruction and the executing instruction is associated with a stage of the pipeline, then the conditional link pointer is necessarily associated with a stage of the pipeline. Arora has in fact taught “identifying and tracking condition instructions including causing link pointers to move through conditional link pointer registers that are associated with stages in a pipeline of a processor” (Figure 1, element 100, column 2, lines 32-45, column 3, lines 9-37, column 4, lines 27-57, column 5, line – column 6, line 10). Therefore this argument is moot.

6. On page 8, Applicant argues in essence:

“Arora provides no teaching, however, that the registers are associated with stages in a pipeline nor that the values are moved through the registers. On the contrary, Arora teaches the values do not move through registers but are in a single memory location. (See column 4, lines 57-61 and column 3, lines 32-49.)”

However, as claimed, the fact that the values of Arora may be stored in a single memory location is irrelevant. In Arora a predicate is associated with a single instruction. As an instruction moves through the pipeline stages, the instruction remains associated with the same predicate. The value of the predicate changes as the instruction status changes when the instruction moves through the pipeline stages (Figure 1, element 100, column 2, lines 32-45, column 3, lines 9-37, column 4, lines 27-57, column 5, line –column 6, line 10). As the instruction moves through the stages of the pipeline, the predicate values effectively move, or change, throughout the pipeline. Therefore this argument is moot.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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8. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, 8-4:30.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie P Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

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EDDIE CHAN
SUPERVISORY PATENT EXAMINER
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